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EXAMINER

POLLACK, MELVIN H

ART UNIT PAPER NUMBER

2145

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,324

Applicant(s)

BROWN, KIRK B.

Examiner

Melvin H. Pollack

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: see attached office action.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 44 recites the limitation "virtual gateway system" in line 1. There is insufficient antecedent basis for this limitation in the claim. The examiner assumes for the purposes of this action only that this represents the normal gateway system of claim 43.

Claim Objections

4. Claim 36 is objected to because of the following informalities: in "each of the predetermined addressed identifying...", the term should be "predetermined addresses." Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-12, 14, 16-21, 26-41, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (6,449,647) in view of Hunter (6,865,608).

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7. For claims 1, 4, Colby teaches a system and method (abstract) for placement in a communication path (Fig. 1b, #110) between a client device (Fig. 1b, , #135) and a plurality of computer network elements (Fig. 1c, #100), the apparatus comprising (col. 1, line 1 – col. 4, line 15):

- a. A data port (Fig. 1c, #170) configured to receive data in accordance with a data protocol (col. 6, lines 12-33); and
- b. A redirection engine (Fig. 1c, #110) coupled to inspect the received data (Fig. 2) and direct corresponding data (Fig. 2, #212) in accordance with the data protocol to a particular one of the plurality of computer network elements (Fig. 1, #165).

8. Colby does not expressly disclose that the network and related protocol may be wireless. Hunter teaches a method (abstract) of content reception and redirection (col. 1, line 1 – col. 4, line 35) in which data is transmitted over a wireless network (Fig. 1). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

9. For claims 2, 8, Colby does not expressly disclose that the particular one of the plurality of computer network elements is a gateway that transforms between the wireless data protocol and a network protocol. Hunter teaches this limitation (Fig. 4; col. 2, lines 10-35). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

10. For claim 3, Colby teaches that a wireless data packet decoding module coupled to the redirection engine (col. 8, lines 20-60; col. 9, lines 5-25).

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11. For claim 5, Colby teaches that the selecting is based at least in part on a load balance criterion (col. 9, lines 25-40).
12. For claim 6, Colby teaches that the selecting is based at least in part on information encoded in a header of the received wireless data protocol message (Figs. 3 and 4; col. 9, lines 5-25).
13. For claim 7, Colby teaches that the selecting is based at least in part on content of the received wireless data protocol message (col. 6, lines 1-35).
14. For claim 9, Colby teaches that the selecting and directing are performed at a proxy to which the wireless client device directs wireless data protocol traffic (col. 5, lines 28-67).
15. For claim 10, Colby teaches that the selecting and directing are performed at a switch that receives wireless data protocol traffic from the wireless client device (col. 5, lines 28-67).
16. For claims 11, 38, Colby does not expressly disclose that the wireless data protocol includes support for wireless application protocol (WAP) traffic. Hunter teaches this limitation (col. 6, lines 25-35). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).
17. For claim 12, Colby teaches a system (abstract) comprising:
 - a. A gateway (Fig. 1b, #110);
 - b. A first gateway cluster (Fig. 1a, #R4), the first gateway cluster associated with a first group of computer servers, each of the computer servers in the first group of computer servers having a different internet protocol address (col. 4, line 65 – col. 5, line 30); and

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c. A second gateway cluster (Fig. 1a, #R1), the second gateway cluster associated with a second group of computer servers (col. 4, line 65 – col. 5, line 30);

d. Wherein the gateway is configured to decode previously encoded data traffic packets to be sent to a selected computer server (col. 6, lines 1-40) within one of the first and second gateway clusters (col. 5, lines 28-67).

18. Colby does not expressly disclose that the network and related protocol may be wireless. Hunter teaches a method (abstract) of content reception and redirection (col. 1, line 1 – col. 4, line 35) in which data is transmitted over a wireless network (Fig. 1). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

19. For claim 14, Colby teaches a third gateway cluster (Fig. 1a, #R5).

20. For claim 16, Colby teaches a load balancing server coupled to the first gateway cluster and the second gateway cluster (Fig 21).

21. For claim 17, Colby teaches a notification server, a wireless data server and storage repository and an internet data server and storage repository, all of which are responsive to the load balancing server (col. 6, line 40 – col. 7, line 25).

22. For claim 18, Colby teaches that the load balancing server allocates data traffic between the first and the second gateway cluster (Fig. 6).

23. Claims 19, 20 and 40 are drawn to the limitations in claim 12. Claim 19 adds that a packet is evaluated to determine at least one of language information, user browser type information and data content type information, and the data is sent to a particular server, the server chosen based on at least one of the aforementioned three types of information. Colby

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teaches this limitation (Fig. 4; #429; col. 9, lines 5-20). Therefore, since claim 12 is rejected, claims 19 and 20 are also rejected for the reasons above.

24. For claims 21, 37, Colby does not expressly disclose that the data packet is a wireless application protocol binary encoded packet data unit. Hunter teaches this limitation (col. 6, lines 5-45). At the time the invention was made, one of ordinary skill in the art would have used Hunter wireless networks in Colby in order to allow connectivity for various devices (col. 1, lines 30-60).

25. Claims 26-29 are drawn to the limitations in claim 19. Therefore, since claim 19 is rejected, claims 26-29 are also rejected for the reasons above.

26. For claim 30, Colby teaches an internal data bus (Fig. 2, #202) responsive to data packets communicated using the first (Fig. 1c, #165) and second data ports (Fig. 1c, #170).

27. For claim 31, Colby teaches a shortcut engine responsive to the parsing engine (Fig. 5).

28. For claim 32, Colby teaches a shortcut table responsive to the shortcut engine (col. 10, line 60 – col. 11, line 10).

29. For claim 33, Colby teaches a data packet forwarding engine responsive to the parsing engine (Fig. 2, WFR).

30. For claim 34, Colby teaches a data packet forwarding table responsive to the data packet forwarding engine (Fig. 4, #429 and #430).

31. Claims 35, 45 are drawn to the limitations in claim 12. Claim 35 adds a logic module programmed to implement a set of rules, the logic module to apply the set of rules to the decoded wireless data packet to determine an internet protocol address identifying a remote computer network element to receive a communication of the wireless data content. Colby teaches this

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limitation (col. 10, lines 10-55). Therefore, since claim 12 is rejected, claim 35 is also rejected for the reasons above.

32. For claim 36, Colby teaches that the logic module determines the internet protocol address by selecting from a set of predetermined addresses, each of the predetermined addresses identifying a distinct server that is a member of a multi-server cluster (Fig. 22; col. 10, lines 10-20).

33. For claim 39, Colby teaches that the decoded wireless data packet is transmitted in accordance with a data transmission protocol over a computer network (col. 6, lines 10-35).

34. For claim 41, Colby teaches a computer server to receive and process the wireless data content (col. 5, lines 30-45).

35. Claims 13, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 12, 19 above, and further in view of Shiigi (6,304,898).

36. For claim 13, Colby and Hunter do not expressly disclose that the first gateway cluster is an electronic mail gateway cluster and the second gateway cluster is a wireless application protocol gateway cluster. Shiigi teaches a method (abstract) of providing e-mail cluster to WAP cluster functionality (col. 1, line 1 – col. 2, line 67) with this limitation (col. 9, line 25 – col. 10, line 40). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

37. For claim 22, Colby and Hunter do not expressly disclose that the particular server is an electronic mail server and further comprising communicating the data request, via an internet data packet message, to the electronic mail server. Shiigi teaches this limitation (Figs. 4-6). At

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the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

38. For claim 23, Colby and Hunter do not expressly disclose an electronic mail message from the electronic mail server at the wireless gateway. Shingi teaches this limitation (Fig. 6, #640). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

39. For claim 24, Colby and Hunter do not expressly disclose binary encoding the electronic mail message into a binary encoded form. Shigi teaches this limitation (Fig. 2A, #6). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

40. For claim 25, Colby and Hunter do not expressly disclose converting the electronic mail message into wireless application protocol format for transmission by wireless equipment to a remote mobile computing device. Shigi teaches this limitation (col. 9, lines 25-40). At the time the invention was made, one of ordinary skill in the art would have added Shiigi's e-mail to WAP methods in order to allow content of multiple types (col. 1, lines 35-50).

41. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 12, 14 above, and further in view of Ryu et al. (6,775,291).

42. For claim 15, Colby and Hunter do not expressly disclose that the third gateway cluster is a short message service gateway cluster. Ryu teaches a method (abstract) of providing wireless content services (col. 1, line 1 – col. 4, line 25) including this limitation (col. 4, line 50 – col. 5, line 65). At the time the invention was made, one of ordinary skill in the art would have used

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Ryu's SMS to WAP system in Colby and Hunter in order to allow improved handling of WAP systems (col. 2, lines 35-45).

43. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claims 35, 41 above, and further in view of Abjanic (6,732,175).

44. For claim 42, Colby and Hunter do not expressly disclose that the wireless data content includes financial transaction data and the remote computer network element comprises a computer server executing an electronic commerce application to handle a financial transaction based on the financial transaction data. Abjanic teaches a method (abstract) of switching based on content data (col. 1, line 1 – col. 2, line 30) for wireless networks (col. 3, lines 47-65) and load balancing (col. 4, lines 14-20) in which financial transaction data is utilized (col. 9, lines 55-67). At the time the invention was made, one of ordinary skill in the art would have added Abjanic to Colby and Hunter in order to allow for a greater array of application programs (col. 4, lines 21-60).

45. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby and Hunter as applied to claim 35 above, and further in view of Lennie et al. (6,836,845).

46. For claim 43, Colby and Hunter do not expressly disclose that the computer network input, the decoding module, and the logic module are all contained within a gateway system that is security protected. Lennie teaches a method (abstract) of transaction processing (col. 1, line 1 – col. 3, line 55) including forwarding and routing transactions (col. 10, lines 43-50) in a wireless environment (Fig. 7) wherein switching components are security protected (Fig. 6). At the time

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the invention was made, one of ordinary skill in the art would have been motivated to use Lennie's security systems in Colby and Hunter in order to prevent fraud and unauthorized accesses (col. 1, lines 25-35).

47. For claim 44, Colby and Hunter do not expressly disclose that the virtual gateway system is security protected by a data firewall located between the virtual gateway system and a public computer network. Lennie teaches this limitation (col. 7, lines 25-50; col. 8, lines 38-50). At the time the invention was made, one of ordinary skill in the art would have been motivated to use Lennie's security systems in Colby and Hunter in order to prevent fraud and unauthorized accesses (col. 1, lines 25-35).

Conclusion

48. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They provide further teachings regarding load balancing, content-based routing, and wireless networks.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP
10 August 2005


Jason L. Arnone
Phony ex Art 2145